Mojave Desert
Air Quality Management District

Draft

Staff Report
Proposed Adoption of
Rule 1106 – *Marine Coating Operations*

For adoption on
August 28, 2006

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STAFF REPORT
TABLE OF CONTENTS
Rule 1106 – *Marine Coating Operations*

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I. PURPOSE OF STAFF REPORT

A staff report serves several discrete purposes. Its primary purpose is to provide a summary and background material to the members of the Governing Board. This allows the members of the Governing Board to be fully informed before making any required decision. It also provides the documentation necessary for the Governing Board to make any findings, which are required by law to be made prior to the approval or adoption of a document. In addition, a staff report ensures that the correct procedures and proper documentation for approval or adoption of a document have been performed. Finally, the staff report provides evidence for defense against legal challenges regarding the propriety of the approval or adoption of the document.

II. EXECUTIVE SUMMARY

The Federal Clean Air Act (FCAA; 42 U.S.C. §§7401 et seq.) requires areas designated non-attainment for ozone and classified moderate and above to adopt and maintain Reasonable Available Control Technology (RACT) rules to control the emissions of volatile organic compounds (VOCs) and oxides of nitrogen (NOx) for categories which the United States Environmental Protection Agency (USEPA) has adopted a Control Techniques Guideline (CTG) or Alternative Control Technique Guideline (ACT) and for all categories where there are major stationary sources of air pollution (42 U.S.C. §7511a(b)(2), FCAA 182(b)(2)). For purposes of the FCAA, portions of the District have been designated non-attainment for ozone and classified severe-17, and the entire District has been classified non-attainment for PM_{10}.

The USEPA has promulgated "Consumer and Commercial Products: Wood Furniture, Aerospace, and Shipbuilding and Ship Repair Coatings: Control Techniques Guidelines (CTG) in Lieu of Regulations" (62 FR 44672, Aug 22, 1997) which apply in part to the source category of boat and ship manufacturers. In addition, the USEPA has also adopted "National Emission Standards for Hazardous Air Pollutants (NESHAP) for Boat Manufacturing "(66 FR 44218, Aug. 22, 2001), and "National Emission Standards for Hazardous Air Pollutants for Ship Building and Ship Repair (Surface Coating) Operations" (60 FR 64330, Dec. 15, 1995) which also apply to this source category.

The District satisfied the FCAA requirement for RACT by adopting Rule 1114 – *Wood Products Coating Operations* and Rule 1115 – *Metal Parts & Products Coating Operations* and applying these rules to all source categories applying these coatings to wood and metal. However, over time RACT has diverged between standard coatings operations and those coatings specifically formulated for the marine environment. The MDAQMD is now proposing to adopt Rule 1106 – *Marine Coating Operations* because the District has six (6) facilities that fall within the source category of boat or ship manufacturing.

III. STAFF RECOMMENDATION

Staff recommends that the Governing Board of the Mojave Desert Air Quality Management District (District) adopt the proposed Rule 1106 – *Marine Coating Operations* and approve the appropriate CEQA documentation. This action is necessary because the District needs to implement RACT and control VOC emissions and from Marine Coating Operations in the source category of boat or ship manufacturing.

IV. LEGAL REQUIREMENTS CHECKLIST

The findings and analysis as indicated below are required for the procedurally correct adoption of Rule 1106 – *Marine Coating Operations*. Each item is discussed, if applicable, in Section V. Copies of related documents are included in the appropriate appendices.

FINDINGS REQUIRED FOR RULES & REGULATIONS:

X Necessity

X Authority

X Clarity

X Consistency

X Nonduplication

X Reference

X Public Notice & Comment

X Public Hearing

REQUIREMENTS FOR STATE IMPLEMENTATION PLAN SUBMISSION (SIP):

X Public Notice & Comment

X Availability of Document

X Notice to Specified Entities (State, Air Districts, USEPA, Other States)

X Public Hearing

X Legal Authority to adopt and implement the document.

X Applicable State laws and regulations were followed.

ELEMENTS OF A FEDERAL SUBMISSION:

X Elements as set forth in applicable Federal law or regulations.

CALIFORNIA ENVIRONMENTAL QUALITY ACT REQUIREMENTS (CEQA):

N/A Ministerial Action

N/A Exemption

X Negative Declaration

N/A Environmental Impact Report

X Appropriate findings, if necessary.

X Public Notice & Comment

SUPPLEMENTAL ENVIRONMENTAL ANALYSIS (RULES & REGULATIONS ONLY):

X Environmental impacts of compliance.

N/A Mitigation of impacts.

N/A Alternative methods of compliance.

OTHER:

X Written analysis of existing air pollution control requirements

X Economic Analysis

X Public Review

V. DISCUSSION OF LEGAL REQUIREMENTS

A. REQUIRED ELEMENTS/FINDINGS

This section discusses the State of California statutory requirements that apply to the proposed adoption of Rule 1106. These are actions that need to be performed and/or information that must be provided in order to amend the rule in a procedurally correct manner.

1. State Findings Required for Adoption of Rules & Regulations:

Before adopting, amending, or repealing a rule or regulation, the District Governing Board is required to make findings of necessity, authority, clarity, consistency, non-duplication, and reference based upon relevant information presented at the hearing. The information below is provided to assist the Board in making these findings.

a. Necessity:

The proposed adoption of Rule 1106 is necessary to control VOC emissions from Marine Coating Operations in the source category of boat or ship manufacturing.

b. Authority:

The District has the authority pursuant to California Health and Safety Code (H & S Code) §40702 to adopt, amend or repeal rules and regulations.

c. Clarity:

The proposed adoption of Rule 1106 is clear in that it is written so that the persons subject to the Rule can easily understand the meaning.

d. Consistency:

The proposed adoption of Rule 1106 is in harmony with, and not in conflict with or contradictory to any State law or regulation, Federal law or regulation, or court decisions.

e. Nonduplication:

The proposed adoption of Rule 1106 does not impose the same requirements as any existing State or Federal law or regulation because RACT diverged between standard coatings operations and those coatings specifically formulated for the marine environment.

Rule 1106 addresses those coatings specifically formulated for use in marine environments.

f. Reference:

The District has the authority pursuant to H & S Code §40702 to adopt, amend or repeal rules and regulations.

g. Public Notice & Comment, Public Hearing:

Notice for the public hearing for the proposed adoption of Rule 1106 will be published July 28, 2006. See Appendix "B" for a copy of the public notice. See Appendix "C" for copies of comments, if any, and District responses.

2. Federal Elements (SIP Submittals, Other Federal Submittals).

Submittals to USEPA are required to include various elements depending upon the type of document submitted and the underlying Federal law that requires the submittal. The information below indicates which elements are required for the proposed adoption of Rule 1106 and how they were satisfied.

a. Satisfaction of Underlying Federal Requirements:

The adoption of Rule 1106 is subject to all the requirements for a SIP submittal because Rule 1106 will be included in the MDAQMD SIP. The criteria for determining completeness of SIP submissions are set forth in 40 CFR Part 51, Appendix V, 2.0.

b. Public Notice and Comment:

Notice for the public hearing for the proposed adoption of Rule 1106 will be published July 28, 2006. See Appendix "B" for a copy of the public notice. See Appendix "C" for copies of comments, if any, and District responses.

c. Availability of Document:

Copies of the proposed adoption of Rule 1106 and the accompanying draft staff report will be made available to the public on July 28, 2006.

d. Notice to Specified Entities:

Copies of the proposed adoption of Rule 1106 and the accompanying draft staff report were sent to all affected agencies. The proposed amendments will be sent to CARB and USEPA on July 18, 2006.

e. Public Hearing:

A public hearing to consider the proposed adoption of Rule 1106 has been set for August 28, 2006.

f. Legal Authority to Adopt and Implement:

The District has the authority pursuant to H&S Code §40702 to adopt, amend, or repeal rules and regulations and to do such acts as may be necessary or proper to execute the duties imposed upon the District.

g. Applicable State Laws and Regulations Were Followed:

Public notice and hearing procedures pursuant to H&S Code §§40725-40728 have been followed. See Section (V)(A)(1) above for compliance with state findings required pursuant to H&S Code §40727. See Section (V)(B) below for compliance with the required analysis of existing requirements pursuant to H&S Code §40727.2. See Section (V)(C) for compliance with economic analysis requirements pursuant to H&S Code §40920.6. See Section (V)(D) below for compliance with provisions of the California Environmental Quality Act (CEQA).

B. WRITTEN ANALYSIS OF EXISTING REQUIREMENTS

H & S Code §40727.2 requires air districts to prepare a written analysis of all existing federal air pollution control requirements that apply to the same equipment or source type as the rule proposed for modification by the district.

The FCAA requires areas designated non-attainment for ozone and classified moderate and above to adopt and maintain RACT rules to control the emissions of volatile organic compounds (VOCs) and oxides of nitrogen (NOx) for categories which the USEPA has adopted a CTG or ACT and for all categories where there are major stationary sources of air pollution (42 U.S.C. §7511a(b)(2), FCAA 182(b)(2)). For purposes of the FCAA, portions of the District have been designated non-attainment for ozone and classified severe-17, and the entire District has been classified non-attainment for PM_{10}.

The USEPA has promulgated "Consumer and Commercial Products: Wood Furniture, Aerospace, and Shipbuilding and Ship Repair Coatings: Control Techniques Guidelines in Lieu of Regulations" (62 FR 44672, Aug 22, 1997) which apply in part to the source category of boat and ship manufacturers. In addition, the USEPA has also adopted "National Emission Standards for Hazardous Air Pollutants for Boat Manufacturing "(66 FR 44218, Aug. 22, 2001), and "National Emission Standards for Hazardous Air Pollutants for Ship Building and Ship Repair (Surface Coating) Operations" (60 FR 64330, Dec. 15, 1995) which also apply to this source category.

The District satisfied the FCAA requirement for RACT by adopting Rule 1114 – *Wood Products Coating Operations* and Rule 1115 – *Metal Parts & Products Coating Operations* and applying these rules to all source categories applying these coatings to wood and metal. However, over time RACT has diverged between standard coatings operations and those coatings specifically formulated for the marine environment. The MDAQMD is now proposing to adopt Rule 1106 – *Marine Coating Operations* because the District has six (6) facilities that fall within the source category of boat or ship manufacturing. The VOC limits in the proposed rule include limits set in the USEPA documents.

C. ECONOMIC ANALYSIS

1. General

The boatyard industry located in the MDAQMD's jurisdiction cannot be competitive with boatyards located in adjacent air districts that have higher VOC limits for specialized marine coatings. As a result, the MDAQMD is addressing the issue of business competitiveness with other air districts through the rule adoption process.

2. Incremental Cost Effectiveness

Pursuant to H&S Code §40920.6, incremental cost effectiveness calculations are required for rules and regulations which are adopted or amended to meet the California Clean Air Act requirements for Best Available Retrofit Control Technology (BARCT) or "all feasible measures" to control volatile compounds, oxides of nitrogen or oxides of sulfur. The proposed adoption of Rule 1106 is not subject to incremental cost effectiveness calculations because it does not involve BARCT or "all feasible measures"**.**

D. ENVIRONMENTAL ANALYSIS (CEQA)

Through the process described below the appropriate CEQA process for the proposed adoption of Rule 1106 was determined.

1. The proposed adoption of Rule 1106 meets the CEQA definition of "project". They are not "ministerial" actions.

2. The proposed adoption of Rule 1106 is exempt from CEQA review because it will not create an adverse impact on the environment. Because there is not the potential that the adoption might cause the release of additional air contaminants or create any adverse impacts, a Class 8 categorical exemption (14 Cal. Code Reg. §15308) applies. Copies of the documents relating to CEQA can be found in Appendix "D".

E. SUPPLEMENTAL ENVIRONMENTAL ANALYSIS

1. Potential Environmental Impacts

There are no potential environmental impacts of compliance with the proposed adoption of Rule 1106. The MDAQMD considers the overall emissions impact of Rule 1106 VOC limits and changes to existing limits to be negligible primarily due to the permitting conditions under which the affected facilities operate. All facilities are currently under a facility wide emissions cap which limits their total potential emissions to a specific amount. Any change to the amount of this facility wide cap will trigger a New Source Review action which would result in additional requirements.

New and existing facilities wishing to add a process using coatings regulated under Rule 1106 will generally undergo at least a partial analysis under the MDAQMD's Regulation XIII – *New Source Review*. In many cases this analysis will result in the imposition of BACT pursuant to the provisions of Rule 1303(A). New facilities would also most likely trigger both BACT and Offsets under the present New Source Review rule. Furthermore, the MDAQMD has mitigated the potential increases to the maximum extent possible by reducing the emissions limits on other coatings categories wherever and whenever feasible.

2. Mitigation of Impacts

N/A

3. Alternative Methods of Compliance

N/A

F. PUBLIC REVIEW

See Staff Report Section (V)(A)(1)(g) and (2)(b), as well as Appendix "B"

VI. TECHNICAL DISCUSSION

A. SOURCE DESCRIPTION

1. Rule Applicability

Rule 1106 generally applies to all marine coating operations of commercial boats and ships, pleasure craft and their appurtenances, and to buoys and oil drilling rigs or their parts and components intended for the marine environment which occur within the MDAQMD. Affected operations include, but are not limited to, the manufacture, component manufacture, refinishing, repair maintenance and service of any type of commercial boats and ships, pleasure craft, buoys and oil drilling rigs or their parts and components. In general, Rule 1106 has similar applicability to the Standard for National Emission Standards for Hazardous Air

Pollutants for Boat Manufacturing (66 FR 44218, Aug. 22, 2001 or 40 CFR Part 63 Subpart VVVV, commencing with §63.5680), the National Emission Standards for Hazardous Air Pollutants for Ship Building and Ship Repair (Surface Coating) Operations" (60 FR 64330, Dec. 15, 1995), and the Consumer and Commercial Products: Wood Furniture, Aerospace, and Shipbuilding and Ship Repair Coatings: Control Techniques Guidelines in Lieu of Regulations" (August 15 1997, FR Doc. 97–22363 Filed 8–21–97). Two existing South Coast Air Quality Management District (SCAQMD) rules with similar applicability were also used as reference for Volatile Organic Compound (VOC) limits and rule content. Materials regulated by this rule include an extensive range of general and extreme performance coatings, and specialized marine and military coating products.

Several facilities in the MDAQMD may be affected by the proposed adoption of Rule 1106. These facilities include Cabo Yachts, Duffy Boats, High Torque Marine, Marine Corps Logistics Base Barstow, Unlimited Performance Products, and the Naval Air Weapons Station in China Lake. This rule does not affect the marine coating manufacturing sector as all affected coatings are currently available and in use. This rule does prohibit the sale within the District of any coating that does not meet the VOC content limits in the proposed rule.

2. Rule History

On July 1, 1993 the MDAQMD was formed pursuant to statute. Pursuant to statute it also retained all the rules and regulations of its predecessor agency, the San Bernardino County Air Pollution Control District (SBCAPCD), until such time as the Governing Board of the MDAQMD wished to adopt, amend or rescind such rules. The MDAQMD Governing Board, at its very first meeting, reaffirmed all the rules and regulations of the SBCAPCD.

Currently Marine Coating VOC contents are regulated under Rule 1114 – *Wood Products Coating Operations*, and Rule 1115 –*Metal Parts & Products Coating Operations*. The November 25, 1996 version of Rule 1114, and the April 22, 1996 version of Rule 1115 are the current versions effective within the MDAQMD. The version of Rules 1114 and 1115 in the SIP for the MDAQMD are the versions contained in the rulebook. Please see section (H) below for a more detailed explanation of the SIP history.

The MDAQMD also has rules from the SCAQMD applicable to the Blythe/Palo Verde Valley area of Riverside County in the State Implementation Plan (SIP) via annexation of that area effective 07/01/94. SCAQMD rules 1106 – *Marine Coating Operations* (08/02/91) and 1106.1 – *Pleasure Craft Coating Operations* (05/01/02) are included in the SIP for the Blythe/Palo Verde Valley area of Riverside County.

The MDAQMD is proposing to adopt Rule 1106 – *Marine Coating Operations* to address recent implementation issues specifically associated with the use and application of non-compliant coatings applied to exposed wood subjected to extreme marine conditions. The issues include the following: 1) Boatyard facilities have been operating under a variance for VOC emissions from Rule 1114 since 2005; 2) Project emission increases may have occurred from the use of compliant products due to coating re-applications and thinning; and, 3) The boatyard industry located in the MDAQMD's jurisdiction cannot compete competitively with boatyards located in adjacent air districts since other air districts have higher VOC content limits for this class of coating.

As a result of the issues identified above, the MDAQMD is now proposing to address the following issues through the rule adoption process: 1) Changing limits within the categories of antifoulants, clear wood finishes (sealers and varnishes), extreme high-gloss coatings, general use coatings, high-gloss coatings, and pre-treatment wash primers, and 2) business competitiveness with other air districts.

B. BASIS FOR LIMITS CONTAINED IN PROPOSED RULE 1106

Rule 1106 has been modeled after South Coast Air Quality Management District's (SCAQMD) current Rule 1106 – *Marine Coating Operations*, and Rule 1106.1 – *Pleasure Craft Coating Operations*. Content from the applicability, requirements, VOC limits, test methods and exemptions from both South Coast rules, the Ventura County Air Pollution Control District (Ventura County APCD) analogous rules, the CTG/NESHAP, and MDAQMD Rules 1114 – *Wood Products Coating Operations* and 1115 – *Metal Parts & Products Coating Operations* have been incorporated into standard MDAQMD format to develop MDAQMD Rule 1106 – *Marine Coating Operations*.

C. EMISSIONS

The coating categories discussed below are those in the rule that have increases or decreases in VOC limits from existing MDAQMD rules or SIP limits incorporated from SCAQMD. These limits have been proposed based on existing SCAQMD and CTG/NESHAP limits. Remaining VOC limits included in the rule are unchanged.

1. Antifoulants

Antifoulants are any coating applied to the underwater portion of a vessel to prevent or reduce the attachment of biological organisms

The CTG/NESHAP address shipbuilding and ship repair and contain the VOC limit of 400 g/L for antifoulants (unspecified substrate). Since MDAQMD Rule 1106 applies to all marine coating operations including pleasure craft coating operations, the MDAQMD is proposing to use those limits as specified in the CTG/NESHAP and SCAQMD Rule 1106 for marine coating operations, as well as the limits as approved in SCAQMD rule 1106.1 for pleasure craft coating operations.

The MDAQMD Rule Book does not contain a rule that sets emission limits for the antifoulant coatings class in the San Bernardino County portion of the MDAQMD.

The 08/02/91 version of SCAQMD Rule 1106 and the 05/01/92 version of SCAQMD Rule 1106.1 are the current versions in the SIP applicable to the Blythe/Palo Verde Valley area of Riverside County acquired into the MDAQMD via annexation of that area effective 07/01/94 from the SCAQMD. The VOC limit in the 08/02/91 version of Rule 1106 for antifoulants is 400g/L. The VOC limit in the 05/01/92 version of Rule 1106.1 is 560 g/L for antifoulant coatings–aluminum substrates, and 150g/L for antifoulant coatings–other substrates. These limits have never been enforced in the Blythe/Palo Verde Valley section of the MDAQMD since there are no facilities utilizing this class of coating in this area.

According to the SCAQMD "Final Supplemental Environmental Assessment" published in January 1999, the VOC limit of 150 g/L for Rule 1106.1 was based on water based technology. At the time of rule adoption, the SCAQMD considered the 150 g/L VOC limit to be "technology forcing" in that the limit was based on products not yet marketed in California. Problems related to water based antifoulants include coating delamination or blistering above the water line, burn back or a "haloing" effect around metal fittings, and insufficient longevity as compared with non-compliant antifoulants.

The current South coast limits were adjusted to 560 g/L VOC for antifoulant coatings – aluminum substrates and 330 g/L VOC for antifoulant coatings – other substrates in Rule 1106.1 on 01/01/2001. Setting the higher VOC limits allowed for the use of solvent based antifoulant formulations with successful performance records.

Since the MDAQMD Rule Book does not contain a rule that sets emission limits for the antifoulant coatings class in the San Bernardino County portion of the MDAQMD, this category will now be regulated and show a net reduction of VOC emissions in the case of Cabo Yachts. The current product in use has a VOC level of 365 g/L VOC and will be lowered to the regulated limit of 330 g/L VOC.

The MDAQMD is now proposing to adopt the VOC limit of 400 g/L for antifoulants in the non-pleasure craft category, and of 560 g/L for antifoulants – aluminum substrates and 330 g/L for antifoulants – other substrates in the pleasure craft category to be consistent with SCAQMD Rule 1106 and 1106.1. (Note: The Ventura County APCD is less restrictive for antifoulants – other substrates with a limit of 400g/L).

2. Clear Wood Finishes – Sealers

A sealer is a low viscosity coating applied to bare wood to seal surface pores to prevent subsequent coatings from being absorbed into the wood.

The 05/01/92 version of SCAQMD Rule 1106.1 is the current versions in the SIP applicable to the Blythe/Palo Verde Valley area of Riverside County acquired into the MDAQMD via annexation of that area effective 07/01/94 from the SCAQMD. The VOC limit in the 05/01/92 version of Rule 1106.1 is 550 g/L for clear wood sealers. This limit has never been enforced in the Blythe/Palo Verde Valley section of the MDAQMD in the marine coatings operations classification because there are none of these facilities in this area.

The MDAQMD Rule Book contains Rule 1114 – *Wood Products Coating Operations* that sets emission limits for the clear wood sealer class. On the effective date of 07/01/2005, MDAQMD Rule 1114 reduced the grams of VOC per liter of coating for clear wood sealers from 680 g/L to 275 g/L. At this time marine coating applicators began to experience problems with compliant products. Sealer problems were related to slow curing times and poor topcoat/primer adhesion. The result of these problems was to reapply these coating, thin the materials, or complete the job using non-compliant materials. Project emission increases may have occurred from the use of compliant materials due to coating re-applications and thinning.

The MDAQMD is now proposing to raise the VOC limit to 550 g/L for clear wood sealers to mirror the action taken by the SCAQMD and the Ventura County APCD, thereby allowing the boatyard industry operating in the MDAQMD to be competitive with boatyards in adjacent air districts with higher VOC limits for these coatings.

3. Clear Wood Finishes – Varnishes

Clear wood finishes are clear or semi-transparent topcoats, including varnishes, applied to wood substrates to provide a transparent or translucent film. A topcoat is any final coating applied to the interior or exterior of a marine vessel.

The 05/01/92 version of SCAQMD Rule 1106.1 is the current version in the SIP applicable to the Blythe/Palo Verde Valley area of Riverside County acquired into the MDAQMD via annexation of that area effective 07/01/94 from the SCAQMD. The VOC limit in the 05/01/92 version of Rule 1106.1 is 490 g/L for clear wood varnishes. This limit has never been enforced in the Blythe/Palo Verde Valley section of the MDAQMD in the marine coatings operations classification because there are none of these facilities in this area.

The MDAQMD Rule Book contains Rule 1114 – *Wood Products Coating Operations* that sets emission limits for the clear wood topcoat class (which by definition includes varnishes). The 07/01/2005 compliance date required by Rule 1114 reduced the grams of VOC per liter of coating for clear topcoats from 680 g/L to 275 g/L. Applicators began to experience problems with compliant marine coating products. Varnish problems included surface texture issues such as “orange peel”, sags, slow drying times, milky finishes, lack of UV protection, and non-durable (not hardwearing) surface finishes susceptible to scuffing and

scratching. The result of these problems was to reapply these coating, thin the materials, or complete the job using non-compliant materials. Project emission increases may have occurred from the use of compliant materials due to coating re-applications and thinning.

The MDAQMD is now proposing to raise the VOC limit to 490 g/L for clear wood varnishes to mirror the action taken by the SCAQMD and Ventura County APCD, thereby allowing the boatyard industry operating in the MDAQMD to be competitive with boatyards in adjacent air districts with higher VOC limits for these coatings.

4. Extreme High-Gloss Coatings

An extreme high gloss coating is any coating that achieves at least 95% reflectance on a 60° meter when tested by ASTM Method D – 523.

On 04/22/96, MDAQMD Rule 1115 – *Metal Parts & Products Coating Operations* set VOC levels at 360 g/L for extreme high-gloss coatings (baked), and 420 g/L for extreme high-gloss coatings (air-dried).

The 08/02/91 version of SCAQMD Rule 1106 and the 05/01/92 version of SCAQMD Rule 1106.1 are the current versions in the SIP applicable to the Blythe/Palo Verde Valley area of Riverside County acquired into the MDAQMD via annexation of that area effective 07/01/94 from the SCAQMD. The VOC limit in the 08/02/91version of Rule 1106 is 420 g/L (baked) and 490 g/L (air-dried) for extreme high-gloss coatings. The VOC limit in the 05/01/92 version of Rule 1106.1 is 490 g/L for extreme high-gloss coatings. These limits have never been enforced in the Blythe/Palo Verde Valley section of the MDAQMD in the marine coatings operations classification because there are none of these facilities in this area

SCAQMD limits are currently set at 420 g/L (baked) and 490 g/L (air-dried).

According to the SCAQMD "Final Supplemental Environmental Assessment" published in January 1999, in 1994 SCAQMD lowered VOC limits for extreme high gloss coatings. Applicators began to experience problems with the use of compliant marine coating topcoats. Topcoat problems included surface texture issues such as "orange peel", sags, and slow drying times. The result of these problems was to reapply these coating, thin the materials, or complete the job using non-compliant materials. Project emission increases may have occurred from the use of compliant materials due to coating re-applications and thinning.

The MDAQMD is proposing to raise the VOC limit for extreme high gloss topcoat coatings to 420 g/L (baked) and 490 g/L (air-dried) to be consistent with SCAQMD limits, thereby allowing the boatyard industry operating in the MDAQMD to be competitive with boatyards in adjacent air districts with higher VOC limits for these coatings.

5. General Use Coatings

A general use coating is any marine coating that is not a specialty coating, or does not have an otherwise specified limit.

Current MDAQMD Rule 1115 – *Metal Parts & Products Coating Operations* general coating limits of 360 g/L (baked) and 420 g/L (air-dried) apply to metal coating operations only.

The 05/01/92 version of SCAQMD Rule 1106.1 is the current versions in the SIP applicable to the Blythe/Palo Verde Valley area of Riverside County acquired into the MDAQMD via annexation of that area effective 07/01/94 from the SCAQMD. The VOC limit in the 05/01/92 version of Rule 1106.1 is 420 g/L for general coatings. This limit has never been enforced in the Blythe/Palo Verde Valley section of the MDAQMD in the marine coatings operations classification because there are none of these facilities in this area.

The MDAQMD is proposing to adopt the SCAQMD limits of 275 g/L (baked) and 340 g/L (air-dried) for general coatings that apply to all substrates. This limit will also be consistent or more stringent than the general coating classification in the Boat Manufacturing NESHAP of 340 g/L VOC. This new VOC limit will be lower than existing MDAQMD levels for this class of coating thereby reducing potential emissions.

6. High – Gloss Coatings

A high-gloss coating is any coating that achieves at least 85% reflectance on a 60° meter when tested by ASTM Method d-523.

The 08/02/91 version of SCAQMD Rule 1106 and the 05/01/92 version of SCAQMD Rule 1106.1 are the current versions in the SIP applicable to the Blythe/Palo Verde Valley area of Riverside County acquired into the MDAQMD via annexation of that area effective 07/01/94 from the SCAQMD. The VOC limit in the 08/02/91version of Rule 1106 is 275 g/L (baked) and 340 g/L(air-dried) for high–gloss coatings. The VOC limit in the 05/01/92 version of Rule 1106.1 is 420 g/L for high-gloss coatings. These limits have never been enforced in the Blythe/Palo Verde Valley section of the MDAQMD in the marine coatings operations classification because there are none of these facilities in this area.

Current MDAQMD Rule 1115 – *Metal Parts & Products Coating Operations* applies to metal coating operations only. MDAQMD Rule 1115 high-gloss coating limits are 360 g/L (baked) and 420 g/L (air-dried).

The MDAQMD is proposing to adopt the SCAQMD limits of 275 g/L (baked) and 340 g/L (air-dried) for high-gloss coatings that apply to all substrates. This new limit will also be more stringent than the high-gloss coating classification in the Boat Manufacturing NESHAP of 420 g/L VOC. This new VOC limit will be

lower than existing MDAQMD levels for this class of coating thereby reducing emissions on a per unit coating basis.

7. Pretreatment Wash Primers

A pretreatment wash primer is a coating which contains no more than 12 percent solids, by weight, and at least ½ percent acids, by weight; is used to provide surface etching; and is applied directly to fiberglass and metal surfaces to provide corrosion resistance and adhesion of subsequent coatings.

Current MDAQMD pretreatment wash primer limit is 420 g/L VOC and applies to metal coating operations only.

The 08/02/91 version of SCAQMD Rule 1106 and the 05/01/92 version of SCAQMD Rule 1106.1 are the current versions in the SIP applicable to the Blythe/Palo Verde Valley area of Riverside County acquired into the MDAQMD via annexation of that area effective 07/01/94 from the SCAQMD. The VOC limit in the 08/02/91version of Rule 1106 is 780 g/L (baked) and 780 g/L (air-dried) for pre-treatment wash primers. The VOC limit in the 05/01/92 version of Rule 1106.1 is 780 g/L for pre-treatment wash primers. The limit set in the Boat Manufacturing NESHAP is also 780 g/L for pretreatment wash primers.

The MDAQMD is proposing to adopt the SCAQMD limits of 780 g/L VOC (baked and air-dried) for pretreatment wash primer coatings that apply to all substrates. This limit will also be consistent with the pretreatment wash primer classification in the Boat Manufacturing NESHAP of 780 g/L VOC.

D. OVERALL EMISSIONS IMPACT

The MDAQMD considers the overall emissions impact of Rule 1106 VOC limits and changes to existing limits to be negligible primarily due to the permitting conditions under which the affected facilities operate. All facilities are currently under a facility wide emissions cap which limits their total potential emissions to a specific amount. Any change to the amount of this facility wide cap will trigger a New Source Review action which would result in additional requirements.

New and existing facilities wishing to add a process using coatings regulated under Rule 1106 will generally undergo at least a partial analysis under the MDAQMD's Regulation XIII - *New Source Review*. In many cases this analysis will result in the imposition of BACT pursuant to the provisions of Rule 1303(A). New facilities would also most likely trigger both BACT and Offsets under the present New Source Review rule. Furthermore, the MDAQMD has mitigated the potential increases to the maximum extent possible by reducing the emissions limits on other coatings categories wherever and whenever feasible.

Table 1 presents the maximum VOC emissions proposed in Rule 1106. Table 2 shows the actual VOC emission impact from proposed Rule 1106 relating specifically to Cabo Yachts.

Table 1

Maximum VOC Emissions Impact from Proposed Rule 1106				
	Facility VOC Limit		Maximum Coating Use (in liters)	
Marine Coating Facility	pounds	grams	at 275 gm/l	at 490 gm/l
Cabo Yachts	78216	35478777.6	129014	72406
Duffy Boats	49800	22589280	82143	46101
Hi-Torque Marine	19800	8981280	32659	18329
Marine Corps Logistics Base - Barstow	Vented to a control device (thermal oxidizer)			
Unlimited Products	65700	29801520	108369	60819
Naval Air Weapons Station - China Lake	No production permits - limited use			
Maximum Marine Coating Emissions under Rule 1114 (pounds):			213516	
Maximum Marine Coating Emissions under proposed Rule 1106 (pounds):				213516

Table 2

Actual VOC Emissions Impact from Proposed Rule 1106 (Cabo Yachts)					
		Current		Proposed	
Coating	Max Use (liters)	VOC Limit (gm/l)	VOC Emissions (lbs)	VOC Limit (gm/l)	VOC Emissions (lbs)
Clear Wood Finish (Topcoats)	2271	445	2228	490	2453
Finish Primer [Epoxy Primer]	1514	399	1332	420	1402
Anti-foulants - Other Substrates	1514	400	1335	330	1101
		Total VOC (pounds):	4895		4957
				Net change in maximum annual VOC (pounds):	62
Notes:					
This table uses actual current coatings and facility maximum use versus proposed limits					

E. CONTROL REQUIREMENTS

1. VOC Limitations

Rule 1106 – *Marine Coating Operations* provides a variety of VOC limits associated with the use and application of compliant coatings applied to exposed substrates subjected to extreme marine conditions. These are the primary control requirements in the rule. The specific proposed VOC limitations are discussed in section (C) above and section (F) below.

2. Control Equipment

In the alternative to VOC limits Rule 1106 provides that a coating of any VOC amount may be used so long as it is vented to an air pollution control device with an Overall Control Efficiency of 85%.

F. COMPARISON OF PROPOSED RULE WITH CTG AND NESHAP

Many of the categories set forth in proposed Rule 1106 have limits in the Boat Manufacturing NESHAP. Table 3 below lists proposed categories and VOC

limits for Rule 1106 – *Marine Coating Operations*. Table 4 below lists the current MDAQMD limits, the current SCAQMD rule limits, the limits found in the rule as included in the MDAQMD SIP (see Section (A)(2) above for explanation), and the limits found in the Boat Manufacturing NESHAP/CTG. From this table it is clear that the proposed VOC limits contained in Rule 1106 are equivalent to or more stringent than both the Boat Manufacturing NESHAP/CTG for all but one coating (Antifoulant Coatings-Aluminum Substrate). The proposed Rule also includes additional categories not included in the NESHAP/CTG taken from SCAQMD Rule 1106 and 1106.1, and is more specific as to method of curing (Baked and Air-Dried) for many of the categories.

Table 3
Proposed VOC Limits for Proposed Rule 1106 – Marine Coating Operations

Marine Coating Materials Categories	**VOC Limit (g/liter)**	
	Air-Dried	**Baked**
Air Flask	340	
Antenna	530	
Antifoulant Coating – Non Pleasure Craft	400	
Antifoulant Coating – Aluminum Substrate Pleasure Craft	560	
Antifoulant Coating – Other Substrates Pleasure Craft	330	
Clear Wood Finishes – Sealers	550	
Clear Wood Finishes – Topcoats	490	
Elastomeric Adhesives with 15%, by weight, Natural or Synthetic Rubber	730	
Extreme Performance	420	360
Extreme High-Gloss	490	420
Finish Primer/Surfacer	420	
General Use	340	275
Heat Resistant	420	360
High Build Primer/Surfacer	340	
High-Gloss	340	275
High-Temperature	500	
Inorganic Zinc (high-build)	340	
Metallic Heat Resistant	530	
Military Exterior Specialty	340	
Mist	610	
Navigational Aids	340	
Nonskid	340	
Nuclear Specialty	420	
Organic Zinc	360	
Pretreatment Wash Primer	780	780
Repair and Maintenance of Thermoplastics	550	550
Rubber Camouflage	340	
Sealant for Wire-Sprayed Aluminum	610	
Special Marking	490	490
Specialty Interior	340	
Tack Coat	610	
Teak Primer	775	
Topcoats – Extreme High Gloss	490	
Topcoats – High Gloss	420	
Underwater Weapons Systems	340	275
Weld-through Precon Primer	340	

Table 4
Comparison of MDAQMD Rules (1114, 1115), SCAQMD Rules (1106, 1106.1), and Boat Manufacturing NESHAP/ CTG VOC Limits

Pleasure Craft Coating Materials Categories	Current MDAQMD Rule Limit & SIP Limit			Current SCAQMD Rule Limit			SIP Rule Limit RvCo PVV			CTG Limit	MACT Limit
		Baked	Air-Dried		Baked	Air-Dried		Baked	Air-Dried		
(SC1106)											
(CTG/MACT)											
(MD1114)											
(SC1106.1)											
(MD1115)											
(SPECIALTY COATINGS)											
Adhesives	250										
Air Flask										340	340
Antenna										530	530
Antenna Coating						530			530		
Antifoulant						400			400		
Antifoulant										400	400
ANTI-FOULANT COATINGS-Aluminum Substrate				560			560				
ANTIFOULANT COATINGS-Other Substrates				330			150				
Clear Coating		520	520								
Clear Sealers	275										
Clear Topcoat	275										
CLEAR WOOD FINISHES-Sealers				550			550				
CLEAR WOOD FINISHES-Varnishes				490			490				

Elastomeric Adhesives with 15%, by weight, Natural or Synthetic Rubber						730			730		
Electric-Insulating Varnish		420	420								
Etching Filler		420	420								
Extreme High-Gloss		360	420								
Extreme High-Gloss Coating					420	490		420	490		
Extreme-Performance		360	420								
Fillers	275										
Finish Primer/Surfacer				420			420				
General		360	420								
General Coating					275	340					
General Use										340	340
Heat Resistant					360	420		360	420		
Heat-Resistant		360	420								
Heat-Resistant										420	420
High Build Primer/Surfacer				340			340				
High-Gloss					275	340		275	340		
High Solid Stains	350										
High Temp						500			500		
High-Gloss		360	420								
High-Gloss										420	420
HIGH-PERFORMANCE-Architectural		420	420								
HIGH-PERFORMANCE-Camouflage		420	420								
HIGH-PERFORMANCE-High-Temperature		420	420								
HIGH-PERFORMANCE-Mold-Seal		420	420								
HIGH-PERFORMANCE-Vacuum-Metalizing		420	420								
High-Temperature										500	500
Inks	500										
Inorganic Zinc high-build										340	340
Low Activation Interior Coating						420			420		
Low-Solids Stains, Toners and Washcoats	120										

Metallic		420	420								
Metallic Heat Resistant						530			530		
Military Exterior										340	340
Military Specification		360	420								
Mist										610	610
Mold-Seal Coatings	750										
Multi-Colored Coatings	275										
Navigational Aids						340			340		
Navigational Aids										550	550
Nonskid										340	340
Nuclear										420	420
Organic Zinc										360	360
Others				420			420				
Pan-Backing		420	420								
Pigmented Primers, Sealers and Undercoats	275										
Pigmented Topcoats	275										
PREFABRICATED ARCHITECTURAL-Component		275	420								
PREFABRICATED ARCHITECTURAL-Repair		360	420								
PREFABRICATED ARCHITECTURAL-Touch-Up		360	420								
Pretreatment Wash Primer										780	780
Pre-Treatment Wash Primer					780	780		780	780		
Pre-Treatment Wash Primer		420	420								
Pretreatment Wash Primers				780			780				
Repair and Maint. of Thermoplastics										550	550
Repair and Maintenance Thermoplastic						550			550		
Rubber Camouflage										340	340
Sealant for Thermal Spray Aluminum										610	610
Sealant for Wire-Sprayed Aluminum						610			610		
Silicone-Release		420	420								

Solar-Absorbent		360	420								
Solvent-based inorganic Zinc						650			650		
Special Marking						490			490		
Special Marking										490	490
Specialty Interior										340	340
Tack Coat						610			610		
Tack Coat										610	610
Teak Primer				775			775				
TOPCOATS-Extreme High Gloss				490			490				
TOPCOATS-High Gloss				420			420				
Undersea Weapons Systems										340	340
Underwater Weapons Systems					275	340		275	340		
Weld-through Preconstruction. Primer										650	650

G. PROPOSED RULE SUMMARY

This section gives a brief overview of the proposed Rule 1106 – *Marine Coating Operations.*

1. Section (A) – General

Section (A)(1)(a) describes the purpose of Rule 1106 – *Marine Coating Operations.*

Section (A)(2)(a) describes the applicability of the rule.

Sections (A)(3)(a)-(d) list the exemptions to this rule.

Section (A)(4) provides alternate applicability for those coatings, coating operations, or facilities exempt from portions of this rule.

2. Section (B) – Definitions

In general, all terms have been formatted into standard MDAQMD rule format for definitions. Definitions were incorporated from SCAQMD Rules 1106 and 1106.1, MDAQMD Rules 1114 and 1115, as well as the Boat Manufacturing NESHAP/CTG.

3. Section (C) –Requirements

Section (C)(1)(a) presents proposed VOC contents of marine coatings. Proposed limits were based on current SCAQMD limits contained in Rules 1106 and 1106.1 and the Boat Manufacturing NESHAP/CTG. Limits are presented as either Air-Dried or Baked. If a curing method was not specified, it is assumed to be an Air-Dried application.

Section (C)(1)(b) cites the alternative to complying with the VOC content limitations by using air pollution control equipment and cites standard Overall Control Efficiency requirements for compliance.

Section (C)(1)(c) cites additional rule provisions to encompass coatings not covered by this rule.

Section (C)(2)(a)-(b) applies to Military Installation use of Extreme Performance Coatings.

Section (C)(3) presents application transfer efficiency methods consistent with MDAQMD Rule 1114 section (C)(2)(a) and MDAQMD Rule 1115 section (C)(1)(a).

Section (C)(4) requires that all products specified for use within the District be compliant with section (C)(1)(a) of this Rule and cannot be otherwise specified by oral or written contract.

Section (C)(5) requires all coatings sold within the District be compliant with section (C)(1)(a) of Rule 1106.

Section (C)(6) requires that manufacturers include designation of VOC content of all coatings and coating components for all marine coating products on data sheets.

Section (C)(7) presents surface preparation and cleanup solvent methods consistent with MDAQMD Rule1115 (C)(4)(a) and (b)

5. Section (D) – Monitoring and Records

Section (D)(1) describes those records that must be maintained to evaluate compliance. It also specifies that records must be maintained on a daily basis.

Section (D)(2) sets forth those records that must be maintained for those facilities utilizing air pollution abatement equipment.

Section (D)(3) requires record to be maintained for 5 years.

6. Section (E) – Compliance Procedures and Test Methods

Section (E)(1)(a) provides the calculation method for testing VOC per liter of coating less water and Exempt Compounds.

Section (E)(1)(b) provides the calculation method for testing VOC per liter of Material.

Section (E)(1)(c) provides the calculation method for testing Overall Control Efficiency.

Section (E)(2)(a) provides the specified test method for determination of VOC content.

Section (E)(2)(b) provides an approved test method for the determination of metal content.

Section (E)(2)(c) provides an approved method for determination of acid content.

Section (E)(2)(d) provides an approved method for determination of the efficiency of the collection (i) and control devices (ii) of the emission control systems

Section (E)(2)(e) provides an approved method for the determination of capture efficiency.

Section (E)(2)(f) provides an approved method for the determination of high gloss and extreme high gloss.

Section (E)(3) states that all test methods referenced in this section shall be the most recently approved versions.

Section (E)(4) describes the process for approval of alternative test methods.

Section (F)(1), (F)(2), and (F)(3) describe what constitutes a violation of this rule.

H. SIP HISTORY

1. SIP History.

a. SIP in the San Bernardino County Portion of MDAQMD

Rule 1106 is a new rule so it is not included in the SIP. The MDAQMD plans to submit Rule 1106 for inclusion in the SIP.

b. SIP in the Riverside County (Blythe/Palo Verde Valley) Portion of the MDAQMD

One of the provisions of the legislation which created the MDAQMD allowed areas contiguous to the MDAQMD boundaries and within the same air basin to leave their current air district and become a part of the MDAQMD. On July 1, 1994 the area commonly known as the Palo Verde Valley in Riverside County, including the City of Blythe, left SCAQMD and joined the MDAQMD. Since USEPA adopts SIP revisions in California as effective within the jurisdictional boundaries of local air districts, when the local boundaries change the SIP as approved by USEPA for that area up to the date of the change remains as the SIP in that particular area. Upon annexation of the Blythe/Palo Verde Valley the MDAQMD acquired the SIP prior to July 1, 1994 that was effective in the Blythe/Palo Verde Valley. Therefore, the SIP history for the Blythe/Palo Verde Valley Portion of the MDAQMD is based upon the rules adopted and approved for that portion of Riverside County by SCAQMD.

There are two rules inherited from SCAQMD which are contained in the SIP for the Blythe/Palo Verde Valley portion of the MDAQMD. These rules are SCAQMD Rule 1106 – Marine Coating Operations and SCAQMD 1106.1 – Pleasure Craft Coating Operations. SCAQMD Rule 1106 was originally adopted on 11/4/1988 and subsequently amended on 5/5/1989, 6/2/1989, 3/2/1990, 11/2/1990, 12/7/1990 and 8/2/1991. Presumably most of these versions were submitted as SIP revisions however, the 8/2/1991 version received a Limited Approval/Limited

Disapproval from USEPA on 12/20/1993 at 40 CFR 52.220(c)(193)(i)(A)(1) (58 FR 66285). Thus the August 2, 1991 version is the version of 1106 in the SIP for the Blythe/Palo Verde Valley upon separation from SCAQMD in July of 1994. SCAQMD Rule 1106.1 was originally adopted on May 1, 1992. This version was submitted as a SIP revision and approved on 4/13/1995 at 40 CFR 52.220(c)(193)(i)(A)(6) (60 FR 18751). This is the version in the SIP for the Blythe/Palo Verde Valley because it was "SIP Pending" at the time of separation from SCAQMD.

Please note that SCAQMD has amended and submitted subsequent versions of both rules 1106 and 1106.1 after July 1, 1994. Any action on rules amended and submitted after July 1, 1994 should have no effect on the Blythe/Palo Verde Valley SIP.

2. SIP Analysis.

The District will request CARB to submit the proposed adoption of Rule 1106 to replace the SIP versions in effect in the San Bernardino County portion of the MDAB and the Blythe/Palo Verde Valley portion of Riverside County. This submission is necessary because Rule 1106 is a new rule.

Since there is a previously existing SIP rule for this category in the Blythe/Palo Verde Valley section of the District, the District will request that it be superseded. In order to replace existing SIP rules the District is required to show that the proposed amendments are not less stringent than the provisions currently in the SIP. The limits from the SCAQMD rule for marine coating operations that applied to the Blythe/Palo Verde have never been enforced because there are none of these facilities in this area.

Rule 1106 is a RACT rule because it complies with or exceeds the CTG and NESHAP.

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Appendix "A"
Rule **1106** - ***Marine Coating Operations***
Iterated Version

The iterated version is provided so that the changes to an existing rule may be easily found. The manner of differentiating text is as follows:

1. Underlined text identifies new or revised language.

2. ~~Lined out text~~ identifies language which is being deleted.

3. Normal text identifies the current language of the rule which will remain unchanged by the adoption of the proposed amendments.

4. *[Bracketed italicized text]* is explanatory material that is not part of the proposed language. It is removed once the proposed amendments are adopted.

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Rule 1106
Marine Coating Operations

(A) General

(1) Purpose

(a) The purpose of this Rule is to limit the emissions of Volatile Organic Compounds (VOC's) from Marine Coatings Operations.

(2) Applicability

(a) This Rule applies to all marine coating operations of both commercial boats and ships, pleasure craft and their appurtenances, and to the coating of buoys and oil drilling rigs or their parts and components intended for the marine environment which occur within the Mojave Desert Air Quality Management District.

(3) Exemptions

The provisions of this rule shall not apply to:

(a) The use of aerosol coating products. [*derived from CARB's Consumer Product Regulation, MDAQMD Rule 1115(D)(1), and SCAQMD Rule 1106(g)(5), 1106.1(f)*]

(b) Facilities whose rate per day of coating use is less than one gallon, including any VOC-containing materials added to the original coating as supplied by the manufacturer. Only coatings subject to this rule shall be included in the calculation of rate per day, or; coating application operations that emit not more than 3 pounds of VOC's per day and not more than 200 pounds of VOC's per calendar year. [*derived from MDAQMD Rule 219(E)(13)(p), 1115(D)(3)(a)*]

(c) Marine coatings applied to interior surfaces of potable water containers. [*derived from SCAQMD Rule 1106(g)(1)*]

(d) Touch-up coatings. [*derived from SCAQMD Rule 1106(g)(2)*]

(4) Any coating, coating operation, or facility which is exempt from all or a portion of the VOC limits of this Rule shall comply with the applicable provisions of Rules 1114, 1115 and 442.

(B) Definitions

For the purpose of this rule the following definitions shall apply:

(1) Adhesive – Any substance that is used to bond one surface to another surface by attachment. [*derived from MDAQMD Rule 1115(B)(1)*]

(2) Aerosol Coating Product – A hand-held, non-refillable container that expels pressurized materials by means of a propellant-induced force. [*derived from SCAQMD Rule 1106(b)(1), 1106.1(b)(1)*]

(3) Air-Dried Coating – Any coating that is not heated above 90°C (194°F) for the purpose of curing or drying. [*derived from SCAQMD Rule 1106*]

(4) Air Flask Coating – A coating applied to the interior surfaces of high pressure breathing air flasks to provide corrosion resistance and which is certified safe for use with breathing air supplies. [*derived from CTG Appendix B*]

(5) Antenna Coating – Any coating applied to equipment and associated structural appurtenances that are used to receive or transmit electronic signals. [*derived from SCAQMD Rule 1106(b)(3)*]

(6) Antifoulant Coating – Any coating applied to the underwater portion of a vessel to prevent or reduce the attachment of biological organisms and is registered with the Environmental Protection Agency (EPA) as a pesticide. [*derived from SCAQMD Rule 1106(b)(4), 1106.1(b)(2), CTG Appendix B*]

(7) As Applied – The condition of a coating at the time of application to the substrate, including any thinning solvent. [*derived from CTG Appendix B*]

(8) As Supplied – The condition of a coating before any thinning, as sold and delivered by the coating manufacturer to the user. [*derived from CTG Appendix B*]

(9) Baked–Coating – Any coating that is cured at a temperature at or above 90°C (194°F). [*derived from SCAQMD Rule 1106(b)(5)*]

(10) Clear Topcoat – A final coating which contains binders, but not opaque pigments, and is specifically formulated to form a transparent or translucent solid protective film. Includes but is not limited to varnishes. [*derived from MDAQMD Rule 1114(B)(1)(g)*]

(11) Clear Wood Finishes – Clear and semi-transparent topcoats applied to wood substrates to provide a transparent or translucent film. [*derived from SCAQMD Rule 1106.1(b)(3)*]

(12) Coating – A material that is applied to a surface and forms a film in order to identify, beautify, protect convey a message, or minimize detection of such surface. "Coating" includes, but is not limited to, materials such as topcoats, stains, sealers, fillers, conversion varnish, pigmented coating, multicolored coating, moldseal coating, washcoat and toner. [*derived from CTG Appendix B*]

(13) District – The Mojave Desert Air Quality Management District the geographical area of which is described in District Rule 103. [*derived from MDAQMD Rule 1301(S)*]

(14) Elastomeric Adhesive – Any adhesive containing natural or synthetic rubber. [*derived from SCAQMD Rule 1106(b)(6)*]

(15) Exempt Compound – Those compounds listed in 40 CFR 51.100(S)(1). [*derived from MDAQMD Rule 1301(HHH)*

(16) Extreme High Gloss Coating – A coating that achieves at least a 95% reflectance on a 60° meter when tested by ASTM Method D-523. [*derived from SCAQMD Rule 1106.1(b)(5)*]

(17) Extreme Performance Coating – A coating that is used on a metal surface where the coated surface, in its intended use, is acutely and chronically exposed to salt water, corrosives, caustics, acids, oxidizing agents, wind or ocean driven debris or electromagnetic pulse. [*derived from MDAQMD Rule 1115(b)(23)*]

(18) Finish Primer/Surfacer – a coating applied with a wet film thickness of less then 10 mils prior to the application of a topcoat for purposes of providing corrosion resistance, adhesion of subsequent coatings, a moisture barrier, or promotion of a uniform surface necessary for filling in surface imperfections. [*derived from SCAQMD Rule 1106.1(b)(6)*]

(19) General Use Coating – A general use coating is any marine coating that is not a specialty coating, or does not have an otherwise specified limit. [*derived from CTG Appendix B*]

(20) "Grams of VOC Per Liter of Coating Less Water and Less Exempt Compounds" (VOC Content) – The weight of VOC per combined volume of VOC and Coating solids, calculated using the formula in subsection (E)(1)(a). [*derived from SCAQMD Rule 1106(b)(9), 1106.1(b)(7)*]

(21) "Grams of VOC Per Liter of Material" – The weight of VOC per volume of material, calculated using the formula found in subsection (E)(1)(b). [*derived from SCAQMD Rule 1106(b)(9) and MDAQMD Rule 1114(B)(1)(t)*]

(22) Heat-Resistant Coating – Any coating which during normal use must withstand temperatures of at least 204°C (400°F). [*derived from SCAQMD Rule 1106(b)(10)*]

(23) High Build Primer/Surfacer – A coating applied with a wet film thickness of 10 mils or more prior to the application of a topcoat for purposes of providing corrosion resistance, adhesion of subsequent coatings, or a moisture barrier, or promoting a uniform surface necessary for filling in surface imperfections. [*derived from SCAQMD Rule 1106.1(b)(8)*]

(24) High-Gloss Coating – Any coating which achieves at least 85% reflectance on a 60° meter when tested by ASTM Method 523. [*derived from SCAQMD Rule 1106(b)(11), 1106.1(b)(9)*]

(25) High Temperature Coating – Any coating which must withstand temperatures of at least 426°C (800°F). [*derived from SCAQMD Rule 1106(b)(12)*]

(26) Inorganic Zinc (high-build) Specialty Coat – A coating that contains 960 grams per liter (8 pounds per gallon) or more elemental zinc incorporated into an inorganic silicate binder that is applied to steel to provide galvanic corrosion resistance. (These coatings are typically applied at more than 2 mil dry film thickness. [*derived from CTG Appendix B*]

(27) Low Activation Interior Coating – Any coating used on interior surfaces aboard ships to minimize the activation of pigments on painted surfaces within a radiation environment. [*derived from SCAQMD Rule 1106(b)(13)*]

(28) Marine Coating – Any coating, except unsaturated polyester resin (fiberglass) coatings, containing volatile organic compounds and applied by any means to ships, boats, and their appurtenances, and to navigational aids and oil drilling rigs intended for the marine environment. [*derived from SCAQMD Rule 1106(b)(14)*]

(29) Metallic Heat-Resistant Coating – Any coating which contains more than 5 grams of metal particles per liter of coating as applied and which must withstand temperatures over 80°C (175°F). [*derived from SCAQMD Rule 1106(b)(15)*]

(30) Military Exterior Specialty Coating – Any exterior topcoat intended by the manufacturer to be applied to military vessels (including US Coast Guard) that are subject to specified chemical, biological, and radiological washdown requirements. [*derived from CTG Appendix B*]

(31) Mist – Any low viscosity, thin film, epoxy coating applied to an inorganic zinc primer that penetrates the porous zinc primer and allows the occluded air to escape through the paint film prior to curing. [*Derived from CTG Appendix B*]

(32) Navigational Aids – Buoys or other Coast Guard waterway markers. [*derived from CTG Appendix B, SCAQMD 1106(b)(16)*]

(33) Non-Skid Coating – Any coating which has, as its primary purpose, the creation of traction to prevent slippage. [*derived from CTG Appendix B*]

(34) Nuclear Specialty Coating – Any protective coating used to seal porous surfaces such as steel (or concrete) that otherwise would be subject to intrusion by radioactive materials. These coatings must be resistant to long-term (service life) cumulative radiation exposure as tested by ASTM D4082–89, relatively easy to decontaminate as determined by ASTM D4256–89, and resistant to various chemicals to which the coatings are likely to be exposed as tested by ASTM D3912 – 80. [*derived from CTG Appendix B*]

(35) Organic Zinc – Any coating derived from zinc dust incorporated into an organic binder that contains more than 960 grams of elemental zinc per liter (8 pounds per gallon) of coating, as applied, and that is used for the expressed purpose of corrosion protection. [*derived from CTG Appendix B*]

(36) Overall Control Efficiency (CE) – The ratio, expressed as a percentage, of the weight of the VOC removed by the emission control system to the total weight of VOC emitted from Coating Application Operations, both measured simultaneously, calculated pursuant to the formulas found in Subsection (F)(1)(c). [*derived from MDAQMD Rule 1114(B)(1)(aa)*]

(37) Pleasure Craft – Vessels which are manufactured or operated primarily for recreational purposes, or leased, rented, or chartered to a person or business for recreational purposes. The owner or operator of such vessels shall be responsible for certifying that the intended use is for recreational purposes. [*derived from CTG Appendix B, SCAQMD Rule 1106.1(b)(10)*]

(38) Pleasure-Craft Coating – Any marine coating, except unsaturated polyester resin (fiberglass) coatings, applied by brush, spray, roller or other means to a pleasure craft purposes. [*derived from SCAQMD Rule 1106.1(b)(11)*]

(39) Pretreatment Wash Primer – A coating which contains no more than 12 percent solids, by weight, and at least ½ percent acids, by weight; is used to provide surface etching; and is applied directly to fiberglass and metal surfaces to provide corrosion resistance and adhesion of subsequent coatings. [*derived from CTG Appendix B, SCAQMD Rule 1106(b)(17), 1106.1(b)(12)*]

(40) Repair and Maintenance Thermoplastic Coating – Any resin-bearing coating, such as vinyl, chlorinated rubber, or bituminous coatings, in which the resin becomes pliable with the application of heat, and is used to recoat portions of a previously coated substrate which has sustained damage to the coating following normal operations purposes. [*derived from CTG Appendix B, SCAQMD Rule 1106(b)(19)*]

(41) Rubber Camouflage – any specially formulated epoxy coating used as a camouflage topcoat for exterior submarine hulls and sonar domes. [*derived from CTG Appendix B*]

(42) Sealant for Wire-Sprayed Aluminum – Any coating of up to one mil (0,0001 inch) in thickness of an epoxy material which is reduced for application with an equal part of an appropriate solvent (naphtha, or ethylene glycol monoethyl ether). [*derived from CTG Appendix B, SCAQMD Rule 1106(b)(19)*]

(43) Sealer – a low viscosity coating, containing binders, applied to bare wood to seal surface pores to prevent subsequent coatings from being absorbed into the wood. [*derived from SCAQMD Rule 1106.1(b)(13)*]

(44) Solvent Cleaning Operation – The removal of loosely held uncured adhesives, uncured inks, uncured coatings, and contaminants from parts, products, tools, machinery, equipment, and general work areas. Contaminants include, but are not limited to, dirt, soil, and grease. In a cleaning process that consists of a series of cleaning methods, each distinct method shall constitute a separate cleaning operation. [*derived from SCAQMD Rule 1106(b)(20)*]

(45) "South Coast Air Quality Management District" (SCAQMD) – The air quality district created pursuant to Division 26, Part 3, Chapter 5.5 of the California Health and Safety Code (commencing with §40400). [*derived from MDAQMD Rule 1113(B)(56)*]

(46) Special Marking Coating – Any coating used for items such as flight decks, ship's numbers, and other safety/identification applications. [*derived from CTG Appendix B, SCAQMD Rule 1106(b)(21)*]

(47) Specialty Interior Coating – An extreme performance coating used on interior surfaces aboard ships which has fire retardant properties and has a toxicity index of less than 0.03 in addition to existing military physical and performance requirements. [*derived from CTG Appendix B*]

(48) Tack Coat – An epoxy coating of up to two mils (0.002 inch) thick applied to an existing epoxy coating. The existing epoxy coating must have aged beyond the time limit specified by the manufacturer for application of the next coat. [*derived from SCAQMD Rule 1106(b)(22)*]

(49) Teak Primer – A coating applied to teak or previously oiled decks in order to improve the adhesion of a seam sealer to wood. [*derived from SCAQMD Rule 1106.1(b)(14)*]

(50) Topcoat – Any final coating applied to the interior or exterior of a pleasure craft. Includes but is not limited to varnishes. [*derived from SCAQMD Rule 1106.1(b)(15)*]

(51) Touch-Up Coating – Any coating used to cover minor imperfections prior to shipment appearing after the main coating operation. [*derived from SCAQMD Rule 1106(b)(23)*]

(52) Underwater Weapons Systems – Any or all components of a weapons system that is launched or fired underwater. [*derived from CTG Appendix B, SCAQMD Rule 1106(b)(24)*]

(53) "United States Environmental Protection Agency" (USEPA) – The United States Environmental Protection Agency, the Administrator of the USEPA and his or her authorized representative. [*derived from MDAQMD Rule 1113(b)(65)*]

(54) Varnishes – Clear wood topcoats formulated with various resins to dry by chemical reaction on exposure to air. [*derived from SCAQMD Rule 1106.1(b)(16)*]

(55) Volatile Organic Compound (VOC) – Any volatile compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and Exempt Compounds. [*derived from MDAQMD Rule 1301(HHH)*]

(56) Wire-Sprayed Aluminum – Any multi-aluminum coating applied to a steel substrate using oxygen fueled combustion spray methods. [*derived from SCAQMD Rule 1106(b)(26)*]

(C) Requirements

(1) VOC Content of Coatings

(a) A person shall not apply any marine coating to commercial boats or ships, pleasure craft and their appurtenances, and to buoys and oil drilling rigs or their parts and components intended for the marine environment, including any VOC-containing materials added to the original coating supplied by the manufacturer, which contains VOC in excess of the limits specified in Table 1. [*derived from MDAQMD Rule 1115(C)(2), SCAQMD Rule 1106 (C)(1) and 1106.1(C)(1)*]

Table 1
COATING LIMITS
(Grams of VOC Per Liter of Coating, Less Water and Less Exempt Compounds)

Marine Coating Materials Categories	**VOC Limit (g/liter)**	
	Air-Dried	**Baked**
Air Flask	340	
Antenna	530	
Antifoulant Coating – Non Pleasure Craft	400	
Antifoulant Coating – Aluminum Substrate Pleasure Craft	560	
Antifoulant Coating – Other Substrates Pleasure Craft	330	
Clear Wood Finishes – Sealers	550	
Clear Wood Finishes – Topcoats	490	
Elastomeric Adhesives with 15%, by weight, Natural or Synthetic Rubber	730	
Extreme Performance	420	360
Extreme High-Gloss	490	420
Finish Primer/Surfacer	420	
General Use	340	275

Heat Resistant	420	360
High Build Primer/Surfacer	340	
High-Gloss	340	275
High-Temperature	500	
Inorganic Zinc (high-build)	340	
Metallic Heat Resistant	530	
Military Exterior Specialty	340	
Mist	610	
Navigational Aids	340	
Nonskid	340	
Nuclear Specialty	420	
Organic Zinc	360	
Pretreatment Wash Primer	780	780
Repair and Maintenance of Thermoplastics	550	550
Rubber Camouflage	340	
Sealant for Wire-Sprayed Aluminum	610	
Special Marking	490	490
Specialty Interior	340	
Tack Coat	610	
Teak Primer	775	
Topcoats – Extreme High Gloss	490	
Topcoats – High Gloss	420	
Underwater Weapons Systems	340	275
Weld-through Precon Primer	340	

(b) In lieu of complying with the VOC content limitations in Table 1, air pollution control equipment with a capture and control system Overall Control Efficiency of at least 85 percent, as determined pursuant to subsections (F)(2)(a)(i) and (F)(2)(e)(i) of this rule may be used. [*derived from MDAQMD Rule 1115(C)(3)*]

(c) Any coating, coating operation, or facility which is exempt from all or a portion of the VOC Content limits of this rule shall comply with the provisions of Rule 442, 1114 and 1115 unless compliance with the limits specified in this rule are achieved. [*derived from MDAQMD Rule 1115(A)(2)(b)*]

(2) Extreme Performance Coatings – Military Installations

(a) The VOC limits of Table 1 shall not apply to only military installation use of an extreme performance coating which has been approved by the APCO in writing pursuant to this subsection.

(b) Any person seeking to use an Extreme-performance Coating in any military coating operation which is subject to the provisions of this Rule shall:

(i) Submit a petition to the APCO stating the performance requirements, volume of coating, and VOC level which is attainable. Such petition shall include a technical justification of the attainable VOC level and an explanation why the coating cannot meet the limits set forth in subsection (C)(1)(a).

(ii) If the APCO grants written approval, such petition shall be resubmitted for approval on an annual basis.

(iii) If the APCO grants written approval, such approval shall contain volume and VOC limit conditions.

(iv) Records shall be maintained pursuant to Section (E).

(3) Transfer Efficiency [*derived from MDAQMD Rule 1115(C)(1)*]

A person shall not apply any coatings to Marine vessels and appurtenances subject to the provisions of this Rule, unless the coating is applied with equipment properly operated according to the manufacturer's suggested guidelines, and using one of the following application methods:

(a) Electrostatic attraction; or

(b) High Volume Low Pressure (HVLP) spray equipment; or

(c) Dip coat; or

(d) Hand application methods; or

(e) Other coating application methods as are demonstrated to have a transfer efficiency at least equal to one of the above methods, and which are used in a manner that the parameters under which they were tested are permanent features of the method. Prior to their use, such coating applications shall be approved in writing by the Executive Director.

(4) Prohibition of Specification [*derived from MDAQMD Rule 1114(C)(4)*]

(a) No person shall solicit or require for use or specify the application of a coating on marine vessels, or part or component thereof if such use or application results in a violation of the provisions of this Rule. The prohibition of this subsection shall apply to all written or oral contracts under the terms of which any coating which is subject to the provisions of this rule is to be applied to any marine vessel, or part or component at any physical location within the District.

(5) Prohibition of Sale [*derived from MDAQMD Rule 1116(C)(4)*]

(a) A person shall not offer for sale or sell within the District any coating that does not meet the VOC content limits, as set forth in Table 1 of this rule. The prohibition of this section shall apply to the sale of any marine coating which will be applied at any physical location within the District,

except those which are specifically exempted in subsection B (15) and (C) of this rule.

(6) Compliance Statement Requirement [*derived from MDAQMD Rule 1115(C)(6)*]

(a) The manufacturer of coatings subject to this rule shall include a designation of VOC as supplied on data sheets; including coating components, expressed in grams per liter or pounds per gallon, excluding water and Exempt Compounds.

(7) Surface Preparation and Cleanup Solvent [*derived from MDAQMD Rule 1115(C)(4)*]

(a) The requirements of this section shall apply to any person using solvent for surface preparation, cleanup, and paint removal, including paint spray equipment.

(b) A person shall not use VOC-containing materials for the cleanup of application equipment used in marine coating operations, unless such material is collected in a closed container when not in use; and

(i) The application equipment is disassembled and cleaned in an enclosed system during the washing, rinsing and draining processes; or
(ii) The application equipment or equipment parts are cleaned in a container which is open only when being accessed for adding, cleaning, or removing application equipment or when cleaning material is being added, provided the cleaned equipment or equipment parts are drained to the container until dripping ceases; or
(iii) Other application equipment cleaning methods that are demonstrated to be as effective as the equipment described above in minimizing emissions of VOC to the atmosphere are used, provided that the device has been approved in writing prior to use, by the APCO.

(c) A person shall not use VOC-containing materials for surface preparation unless:

(i) The material contains 200 grams or less of VOC per liter of material (1.67 pounds per gallon); or
(ii) The material has an initial boiling point of 190°C (374°F) or greater; or
(iii) The material has a total VOC vapor pressure of 20 mm Hg or less, at 20°C (68°F).

(d) A person shall use closed, nonabsorbent containers for the storage of fresh or spent solvent, and disposal of cloth, paper, or any other absorbent material used for solvent surface preparation and cleanup.

(D) Monitoring and Records [*derived from MDAQMD Rule 1115(F)*]

(1) Coating Records

(a) Any person subject to section (C) or claiming exemption under section (A)(3) shall comply with the following requirements:

(i) The person shall maintain and have available during an inspection, a current list of Coatings in use which provides all of the Coating data necessary to evaluate compliance, including the following information, as applicable:
1. Coating, catalyst, and reducer used.
2. Mix ratio of components used.
3. VOC Content of coating as applied.

(ii) The person shall maintain records on a daily basis including:
1. Coating and mix ratio of components used in the coating; and
2. Quantity of each coating applied.

(iii) The person shall maintain records on a daily basis showing the type and amount of solvent used for cleanup, surface preparation, and paint removal.

(b) Notwithstanding the provisions of subsection (E)(1)(a), a person or facility which exclusively uses Coatings formulations compliant with subsection (D)(1)(a) may maintain usage records on a monthly basis.

(2) Compliance Assurance Monitoring [*derived from MDAQMD Rule 1114(F)(2)*]

(a) Each Coating Application Operation subject to subparagraph (C)(1) which is using air pollution abatement equipment to meet the control requirement shall:

(i) Utilize Compliance Assurance Monitoring, as approved by the APCO. Each monitoring device(s), mechanism and/or technique shall be calibrated/maintained in a manner approved by the APCO; and

(ii) Maintain and produce daily records of key system operating parameters and maintenance procedures which will demonstrate continuous operation and compliance of the air pollution abatement equipment during periods of emissions-producing activities. Key system operating parameters are those necessary to ensure compliance with VOC content of coating requirements, such as temperatures, pressures and flow rates.

(b) Compliance with subsection (C)(1) shall be determined by compliance testing as prescribed in subsection (E)(2) and/or by evaluating Compliance Assurance Monitoring data.

(3) All records for the previous five year period maintained and produced pursuant to this Section shall be retained and available for inspection by the APCO upon request.

(E) Compliance Procedures and Test Methods [*derived from MDAQMD Rule 1114(G), 1115(F), SCAQMD Rule 1106(e), 1106.1(e)*]

(1) Calculation Methods

(a) Grams of VOC per liter of coating less water and less Exempt Compounds shall be determined by the following equation:

$$Gv = \frac{Ws - Ww - Wes}{Vm - Vw - Ves}$$

Where: Gv=Grams of VOC per liter of coating less water and less Exempt Compounds
W_s=weight of volatile compounds in grams
W_w=weight of water in grams
W_{es}=weight of Exempt Compounds in grams
V_m=volume of material in liters
V_w=volume of water in liters
V_{es}=volume of Exempt Compounds in liters

(b) Grams of VOC Per Liter of Material shall be determined by the following equation:

$$Gv = \frac{Ws - Ww - Wes}{Vm}$$

Where: Gv=Grams of VOC per liter of coating less water and less Exempt Compounds
W_s=weight of volatile compounds in grams
W_w=weight of water in grams
W_{es}=weight of Exempt Compounds in grams
V_m=volume of material in liters

(c) Overall Control Efficiency shall be determined by the following equations

$$CE = \frac{(Wc - Wa)}{We} x100$$

$$CE = \frac{[(CaptureEfficiency)x(ControlDeviceEfficiency)}{100}$$

(2) The following specified test methods shall be used to determine compliance with the provisions of this Rule. [*derived from SCAQMD Rule 1106(e), 1106.1(e)*]

(a) Determination of VOC Content:

The VOC content of coatings, subject to the provisions of this rule shall be determined by the following methods:

(i) United States Environmental Protection Agency (USEPA) Reference Method 24 (40 CFR 60, Appendix A) for VOC content and ASTM D4457-85, or CARB Method 432 for determination of exempt compounds. The Exempt Compound content shall be determined by SCAQMD Method 303 *Determination of Exempt Compounds* contained in the SCAQMD "Laboratory Methods of Analysis for Enforcement Samples" manual; or,

(ii) SCAQMD Method 304 – *Determination of Volatile Organic Compounds (VOC) in Various Materials* contained in the SCAQMD "Laboratory Methods of Analysis for Enforcement Samples" manual.

(iii) Exempt Perfluorocarbon Compounds: The following classes of compounds: cyclic, branched, or linear, completely fluorinated alkanes; cyclic, branched, or linear, completely fluorinated ethers with no unsaturations; cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine, will be analyzed as Exempt Compounds for compliance with section (C), only when manufacturers specify which individual compounds are used in the coating formulation. In addition, the manufacturers shall identify the USEPA, CARB, or other approved test methods used to quantify the amount of each Exempt Compound.

(iv) Determination of the initial boiling point of liquid containing VOC, subject to subsection (C)(1)(a), shall be conducted in accordance with ASTM D1078-86.

(v) Calculation of total VOC vapor pressure for materials subject to subsection (C)(1)(a) shall be conducted in accordance with ASTM D2879-86. The fraction of water and exempt compounds in the liquid phase shall be determined by using ASTM D3792-91 and D4457-85 and shall be used to calculate the partial pressure of water and exempt compounds. The results of vapor pressure

measurements obtained using ASTM D2879-86 shall be corrected for partial pressure of water and exempt compounds.

(vi) Measurement of solvent losses from alternative application cleaning equipment subject to (C)(6)(b) shall be conducted in accordance with the South Coast Air Quality Management District's "General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems"(11/1/94).

(b) Determination of Metal Content: [*derived from MDAQMD Rule 1115(G)(2)(f) and SCAQMD Rule 1106(e)(2)*]

(i) The metal content in metallic coatings subject to the provisions of this rule shall be determined by the SCAQMD Method 311 (Analysis of Percent Metal in Metallic Coatings by Spectrographic Method) contained in the SCAQMD "Laboratory Methods of Analysis for Enforcement Samples" manual.

(c) Determination of Acid Content [*derived from MDAQMD Rule 1115(G)(2)(e) and SCAQMD Rule 1106(e)(3), 1106.1(e)(2)*]

(i) The acid content of coating subject to the provisions of this rule shall be determined by ASTM D1613-85 (Acidity in Volatile Solvents and Chemical Intermediates Used in Paint. Varnish, Lacquer, and Related Products).

(d) Determination of Efficiency of Emission Control System [*derived from SCAQMD Rule 1106(e)(4)*]

(i) The efficiency of the collection device of the emission control system as specified in paragraph (C)(1)(b) shall be determined by the USEPA method cited in 55 Federal Register 26865 (June 29, 1990), or any other method approved by the USEPA, the California Air Resources Board, and the District.

(ii) The efficiency of the control device of the emission control system as specified in paragraph (C)(1)(b) and the VOC content in the control device exhaust gases, measured and calculated as carbon, shall be determined by USEPA Test Methods 25, 25A, or SCAQMD Method 25.1 (Determination of Total Gaseous Non-Methane Organic Emissions as Carbon) as applicable. USEPA Test Method 18, or ARB Method 422 shall be used to determine emissions of Exempt Compounds.

(e) Determination of Capture Efficiency [*derived from MDAQMD Rule 1114(G)(2)(c), 1115(G)(2)(g)*]

(i) Capture efficiency shall be determined according to the USEPA's technical document, "Guidelines for Determining Capture Efficiency" (1/9/95).

(f) Determination of Extreme High Gloss and High Gloss

(i) Gloss shall be determined by ASTM Method D-523.

(3) All test methods referenced in this section shall be the most recently approved version. [*derived from SCAQMD Rule 1106(e)(6)*]

(4) Alternative Test Methods

(a) Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with any provisions of this rule may also be used after review and approval in writhing by the District, CARB and USEPA. [*derived from MDAQMD Rule 1115(G)(2)(j)*]

(F) Violations

(1) Failure to comply with any provision of this Rule shall constitute a violation of the Rule.

(2) A violation of the limits contained in this Rule as determined by any one of these test methods shall constitute a violation of this Rule. [*derived from MDAQMD 1114(G)(1) and 1115(G)(1)*]

(3) When more than one test method or set of test methods are specified for any testing, a violation of any requirement of this rule established by any one of the specified test methods or set of test methods shall constitute a violation of the rule. [*derived from SCAQMD Rule 1106(e)(5)*]

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Appendix "B"

Public Notice Documents

1. Proof of Publication – Daily Press July 28, 2006
2. Proof of Publication – Riverside Press Enterprise July 28, 2006

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NOTICE OF HEARING

NOTICE IS HEARBY GIVEN that the Governing Board of the Mojave Desert Air Quality Management District (MDAQMD) will conduct a public hearing on August 28, 2006 at 10:00 A.M. to consider the proposed Adoption of Rule 1106 – *Marine Coating Operations*.

SAID HEARING will be conducted in the Governing Board Chambers located at the MDAQMD offices 14306 Park Avenue, Victorville, CA 92392-2310 where all interested persons may be present and be heard. Copies of the proposed adoption of Rule 1106 – *Marine Coating Operations* and the Staff Report are on file and may be obtained from the Clerk of the Governing Bard at the MDAQMD Offices. Written comments may be submitted to Eldon Heaston, Deputy APCO at the above office address. Comments must be received no later than August 21, 2006 to be considered. If you have any questions you may contact Roseana Navarro-Brasington or Tracy Walters at (760) 245-1661 x5706 or x6122 for further information.

The proposed adoption of Rule 1106 – *Marine Coating Operations* will implement RACT and control VOC emissions and from Marine Coating Operations in the source category of boat or ship manufacturing.

Pursuant to the California Environmental Quality Act (CEQA) the MDAQMD has determined that a Categorical Exemption (Class 8 – 14 Cal. Code Reg §15308) applies and has prepared a *Notice of Exemption* for this action.

Michele Baird
Clerk of the Board
Mojave Desert Air Quality Management District

[Insert public notice image here]

Appendix "C"

Public Comments and Responses

[To be included if and when received.]

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[Insert comment letter image here]

[Insert Response here.]

Appendix "D"

California Environmental Quality Act
Documentation

1. Notice Of Exemption – San Bernardino County
2. Notice Of Exemption – Riverside County

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NOTICE OF EXEMPTION

TO: County Clerk
San Bernardino County
385 N. Arrowhead, 2nd Floor
San Bernardino, CA 92415

FROM: Mojave Desert
Air Quality Management District
14306 Park Ave
Victorville, CA 92392-2310

_X_ MDAQMD Clerk of the Governing Board

PROJECT TITLE: Adoption of Rule 1106 – *Marine Coating Operations*

PROJECT LOCATION – SPECIFIC: San Bernardino County portion of the Mojave Desert Air Basin and Palo Verde Valley portion of Riverside County.

PROJECT LOCATION – COUNTY: San Bernardino and Riverside Counties

DESCRIPTION OF PROJECT: The proposed adoption of Rule 1106 is necessary because the District needs to control VOC emissions from Marine Coating Operations in the source category of boat or ship manufacturing.

NAME OF PUBLIC AGENCY APPROVING PROJECT: Mojave Desert AQMD

NAME OF PERSON OR AGENCY CARRYING OUT PROJECT: Mojave Desert AQMD

EXEMPT STATUS (CHECK ONE)

Ministerial (Pub. Res. Code §21080(b)(1); 14 Cal Code Reg. §15268)
Emergency Project (Pub. Res. Code §21080(b)(4); 14 Cal Code Reg. §15269(b))
_X_ Categorical Exemption – Class 8 (14 Cal Code Reg. §15308)

REASONS WHY PROJECT IS EXEMPT: The proposed Adoption of Rule 1106 – *Marine Coating Operations* is exempt from CEQA review because it will not create any adverse impacts on the environment. Because there is not potential that the amendments might cause the release of additional air contaminants or create any adverse environmental impacts, a Class 8 categorical exemption (14 Cal. Code Reg. §15308) applies.

LEAD AGENCY CONTACT PERSON: Eldon Heaston **PHONE:** (760) 245-1661

SIGNATURE: _____ **TITLE:** Executive Director **DATE:** 08/28/06

DATE RECEIVED FOR FILING:

NOTICE OF EXEMPTION

TO: Clerk/Recorder
Riverside County
3470 12th St.
Riverside, CA 92501

FROM: Mojave Desert
Air Quality Management District
14306 Park Ave
Victorville, CA 92392-2310

X MDAQMD Clerk of the Governing Board

PROJECT TITLE: Adoption of Rule 1106 – *Marine Coating Operations*

PROJECT LOCATION – SPECIFIC: San Bernardino County portion of the Mojave Desert Air Basin and Palo Verde Valley portion of Riverside County.

PROJECT LOCATION – COUNTY: San Bernardino and Riverside Counties

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LEAD AGENCY CONTACT PERSON: Eldon Heaston **PHONE:** (760) 245-1661

SIGNATURE: _____ **TITLE:** Executive Director **DATE:** 08/28/06

DATE RECEIVED FOR FILING:

Appendix "E"
Bibliography

The following documents were consulted in the preparation of this staff report.

1. National Emission Standards for Hazardous Air Pollutants for Shipbuilding and Ship Repair (Surface Coating) Operations (60 FR 64330, December 15, 1995)
2. National Emission Standards for Hazardous Air Pollutants for Boat Manufacturing (66 FR 44218, August 22, 2001)
3. Consumer and Commercial Products: Wood Furniture, Aerospace, and Shipbuilding and Ship Repair Coatings: Control Techniques Guidelines in Lieu of Regulations (62 FR 44672, August 22, 1997)
4. SCAQMD Rule 1106 – MARINE COATING OPERATIONS
5. SCAQMD Rule 1106.1 – PLEASURE CRAFT COATING OPERATIONS

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